

C L A I M S

What is claimed is:

1. Apparatus for determining the location of an item, from among a plurality of like items, said apparatus comprising, in combination:

(a) a paging device adapted to be located on or near said item, said paging device having a unique paging device identification code and including:

(1) an RF receiver for receiving and detecting RF transmissions from a commercial paging service, said RF transmissions including a paging device identification code for a particular paging device and a paging message associated therewith;

(2) a comparator, connected to said RF receiver, for determining when the paging device identification code received from the commercial paging service equals the paging device identification code for the respective paging device;

(3) a decoder, connected to the RF receiver and the comparator, for decoding the paging message when enabled by said comparator, one of said paging messages including a command to emit a locator signal;

(b) a locator transmitter, adapted to be co-located with said item and said paging device and being connected to said paging device, said locator transmitter producing a locator signal in response to a command from said paging device; and

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(c) a locator device, within range to receive said locator signal, for determining the location of said locator transmitter.

2. The apparatus defined in claim 1, further comprising:

(d) a transponder tag, adapted to be co-located on or near said item with said paging device, said tag having means for emitting an RF signal in response to an RF interrogation, said RF signal containing a unique tag identification code;

(e) a transponder reader for producing an RF interrogation for a transponder tag, for receiving an RF signal from a tag in response to such interrogation and for decoding the tag identification code from said RF signal.

3. The apparatus defined in claim 2, wherein the transponder tag utilizes energy from said RF interrogation to transmit said RF signal,

whereby said transponder tag requires no other power source.

4. The apparatus defined in claim 2, wherein one of said paging messages includes a command to switch off the co-located tag, and wherein said apparatus further comprises a tag control device, connected to said paging device and to said tag, for preventing said tag from responding to an RF interrogation when said switch off command is received by said paging device.

5. The apparatus defined in claim 2, further comprising a CPU, coupled to said transponder reader, for initiating a page by said commercial paging system.

6. The apparatus defined in claim 1, wherein said locator transmitter produces, and said locator device receives, a RF locator signal.

7. The apparatus defined in claim 1, wherein said locator transmitter produces, and said locator device receives, an infrared locator signal.

8. The apparatus defined in claim 6, wherein said locator transmitter produces, and said locator device receives, an ultrasound locator signal.

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